

4 Turkey Hill Road
Newtown, CT 06470
Tel (203) 270-4300
Fax (203) 426-9968



Marianne Brown,
Chairman

Fred Hurley,
Director

WATER AND SEWER AUTHORITY

THESE MINUTES ARE SUBJECT TO APPROVAL BY THE WATER AND SEWER AUTHORITY

The Water and Sewer Authority held a regular meeting, Thursday, December 9, 2021. The meeting was held at Newtown Public Works, 4 Turkey Hill Road, Newtown, CT. The meeting was called to order at 7:00pm.

Present: Lou Carbone, Gene Vetrano, Carl Zencey, Mark Benedict, Allan Shepard

Absent: Marianne Brown, George Hill

Also Present: Director of Public Works Fred Hurley, Julio Segarra from Suez Environmental Service, Doug Brisee from Fuss and O'Neil, 6 members of the public and 1 member of the public via teleconference.

Public Participation – None

Minutes – M. Benedict moved to approve the minutes of the 11/4/21 meeting. A. Shepard seconded, all in favor. A. Shepard moved to approve the minutes of the 11/29/21 special meeting. L. Carbone seconded, all in favor.

Report by Suez Water Environmental Services – J. Segarra reported that the CT Department of Public Health did a sanitary water survey at FFH and they Suez and Fuss & O'Neill submitted the response. On the wastewater side, there was an exceedance of PH due to one piece of equipment. The repair was made and it corrected itself quickly. They checked the water up stream and down stream and everything was good. He explained that there have been issues at the Hawleyville pump station. He provided documentation of problems related to flushing items other than toilet paper (*Attached*).

Report by Public Works Director – F. Hurley reported that they received the approval letter from EDA for Richards Construction Company to install the sewer pipe at FFH. They were the low bidder and came in under budget. They are concerned that once the notice to proceed is issued, how long it takes for the sewer pipe to arrive. They also received a notice of violation for non-renewal for Bunglallow Terrace subsurface disposal which is being prepared by Fuss & O'Neill. It was a ten(10) year renewal that the Town received no notice of due to Covid restrictions at DEEP.

UNFINISHED BUSINESS

Woods/Maplewood Pump Station –Currently there is a bar screen system in place and it captures a lot of rags, adult diapers and rubber gloves. The Woods and Maplewoods are in disagreement regarding responsibility. From the perspective of The Woods the problem is being caused by Maplewoods and not by them. J. Segarra disagreed, that both facilities contribute to the problem due to user behavior.

Jeff Fournier from Tucker Mechanical, consultant for The Woods, explained that the parties that are managing the pump house are not working together. He explained that they wouldn't be in the room if

they all stopped putting debris down the drain. You need to train the employees and manage. There maybe excessive loading on one side but increased flow on the other. The debris has diminished over the last 6 months because everyone is paying attention. The Woods is requesting that one solution would be to have the WSA take over the pump station and they would pay for it. A. Shepard explained that if they come up with a solution and it is good, the WSA will do everything possible to assist but they will not be going between two parties to come up with a solution.

40-50 Mile Hill Road Request for Water – F. Hurley reported that he talked with Jason Edwards who was working for Lee Samowitch, the property owner, to put together a project. He measured the distance at either end of the property and found that the distance on Mile Hill South for Aquarion or FFH hookup is identical. There is also nothing that prevents him from drilling wells.

EDA grant for FFH – Reported in Pubic Works Director's report.

Sandy Hook Pump Station – D. Brisee from Fuss & O'Neill reported that the panel and pumps have shipped and they are looking to fire the station up later next week. Income will be presented in January with the combined budget in February.

Financials – F. Hurley presented a preliminary budget for expenses (*attached*). He explained that they are programming in a 15% increase on utilities.

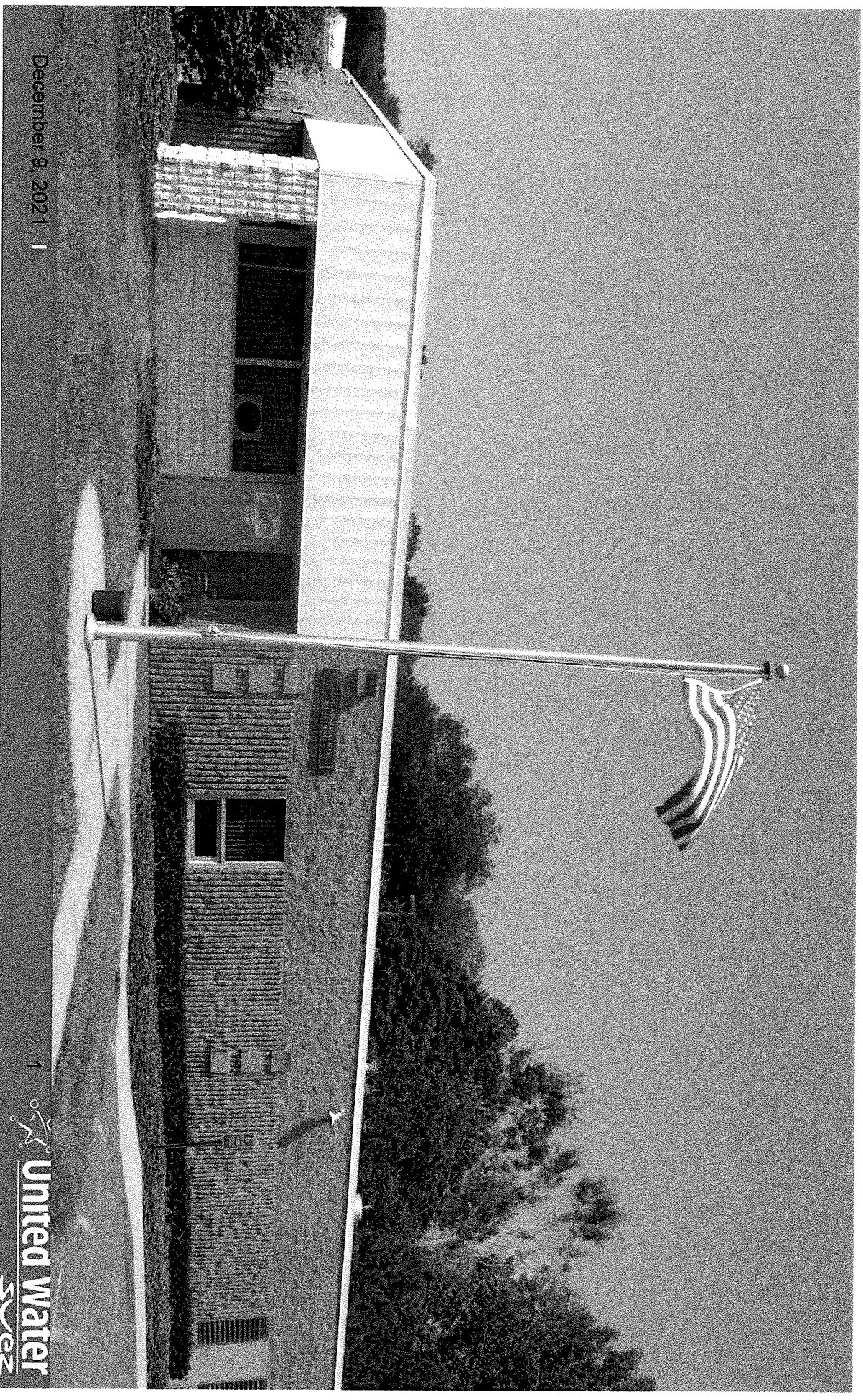
I&I – F. Hurley reported that there will be a joint camera project with Public Works. PW will be checking some drainage systems and WSA will look at the Hanover sewer area that has had I&I issues. On the town's side they are looking at pipe to determine if they need to be replaced. For sewer we will have some long runs between manholes. J. Segarra reported that the 302 trailer park may have their septic tank or leaching fields hooked into the sewers. Every time it rains, they have a catastrophic problem, we will investigate further.

Comments from Board Members – None

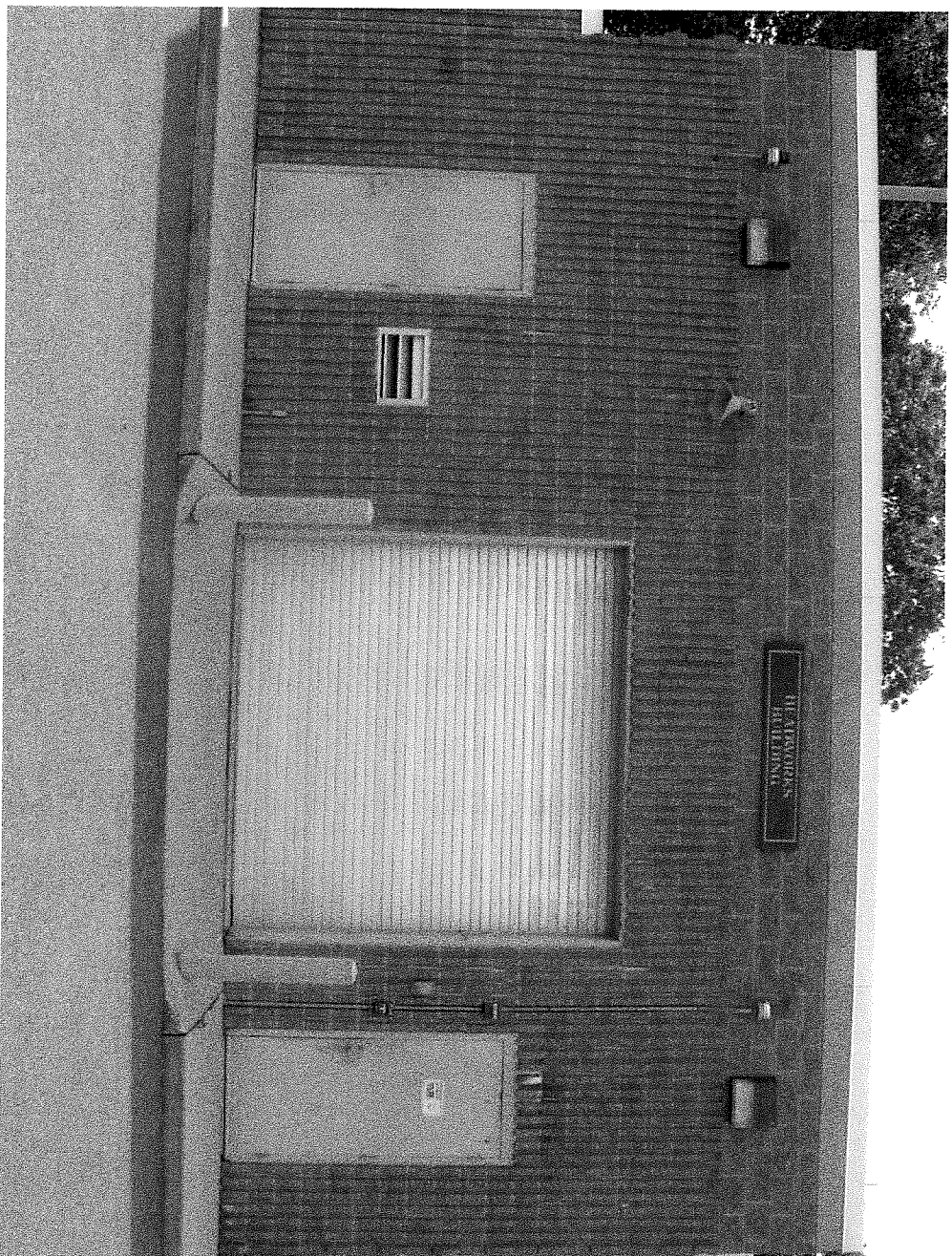
Having no further business, the meeting was adjourned at 8:42pm.

Respectfully submitted
Arlene Miles, Clerk

Newtown W.P.C.F.



Preliminary Building or Head works



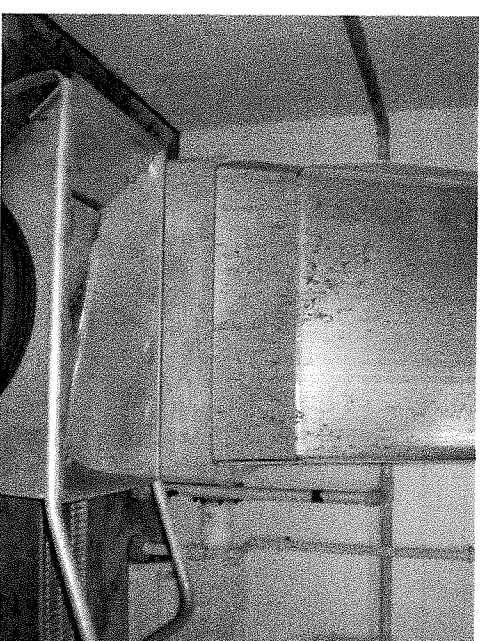
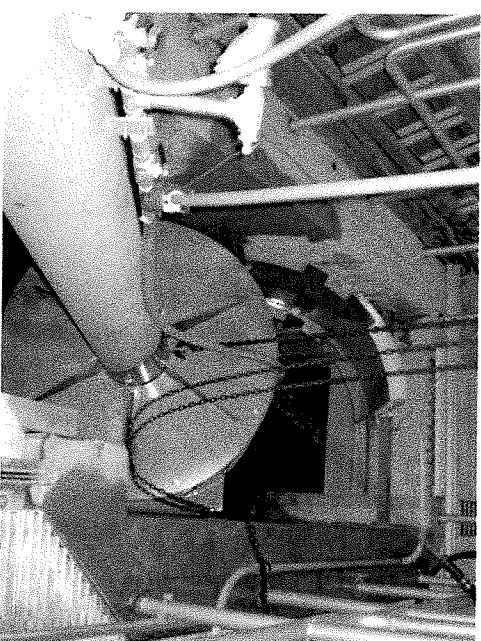
December 9, 2021 |

Manual removal of Rags at the Course Barscreen

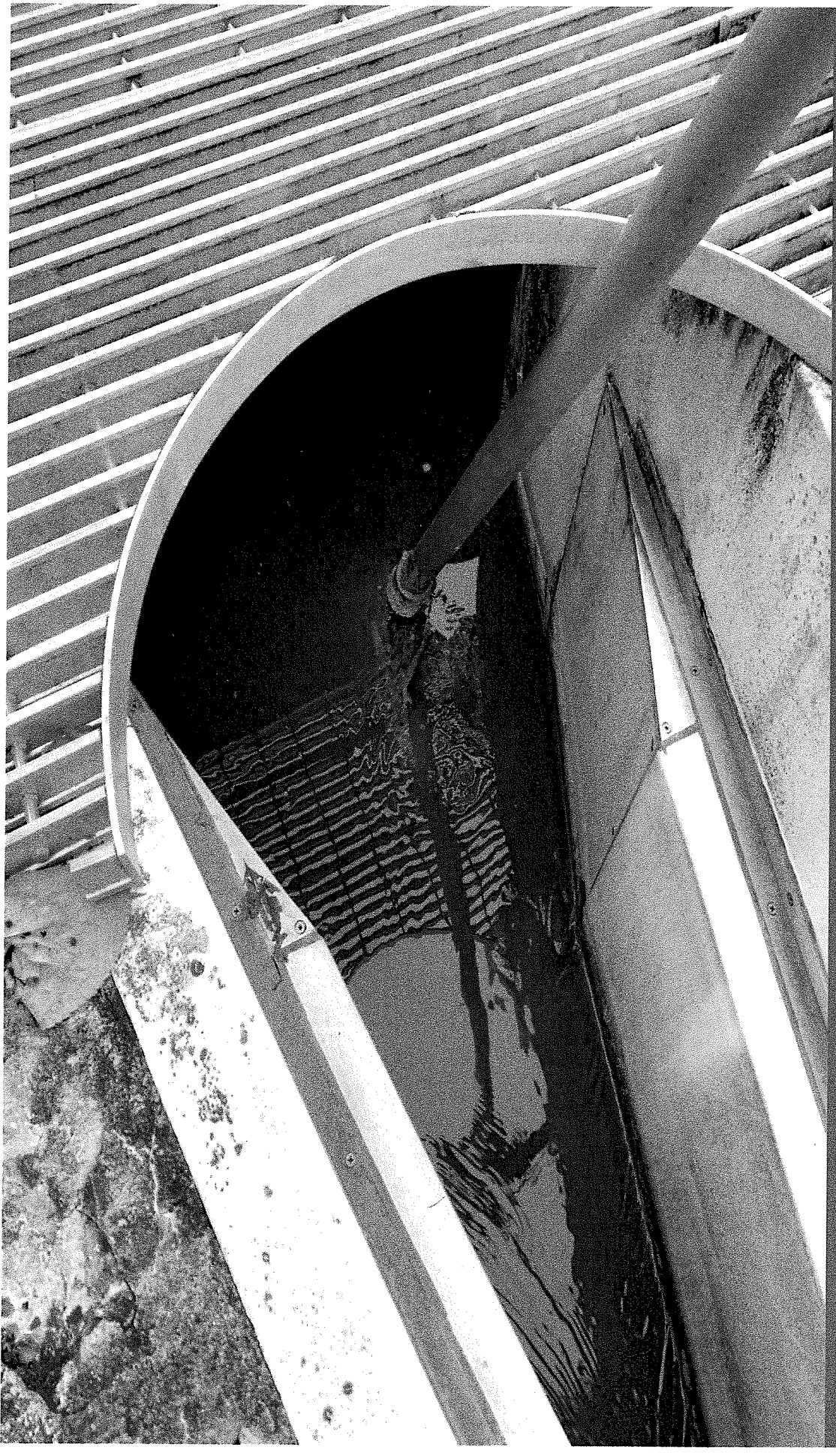


PRELIMINARY BUILDING

- ROTOMAT
 - SHREDS , WASH, AND REMOVES DEBRIS IN ORDER TO PROTECT THE DOWNSTREAM EQUIPMENT AND PROCESS.
- DEGRITTER
 - PROTECTS PLANT EQUIPMENT BY REMOVING ABRASIVE INORGANICS SUCH AS GRIT AND SAND



Reconstituted rags build up throughout the Plant



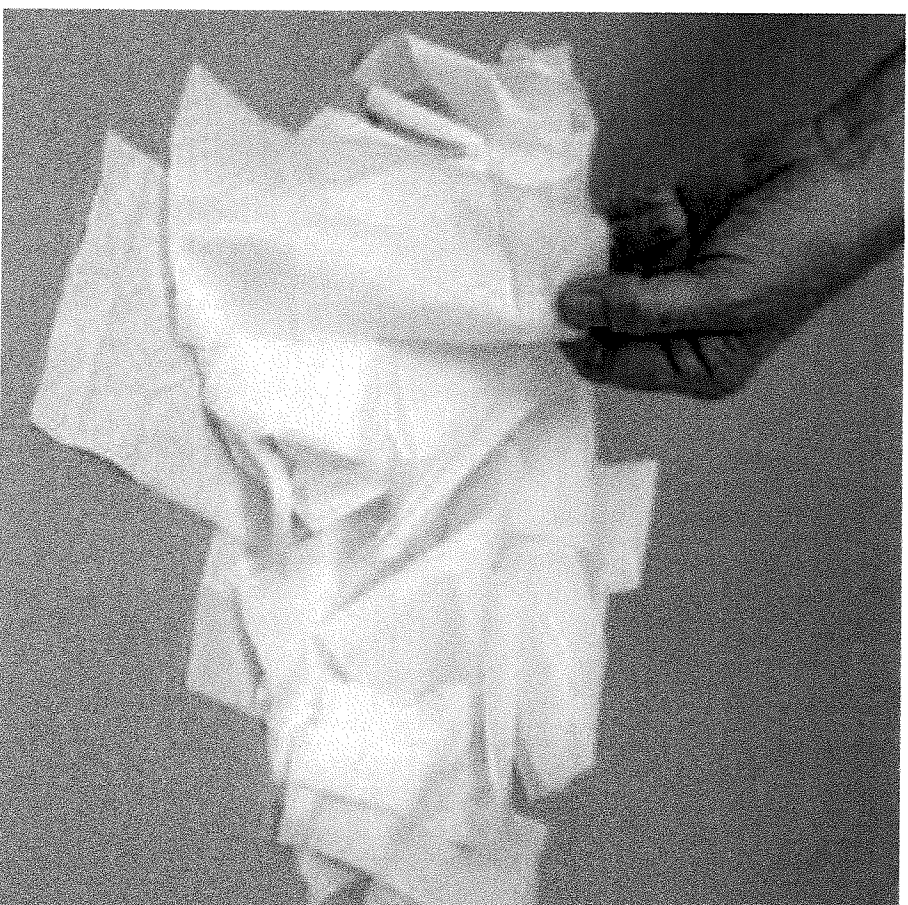
December 9, 2021 |

The Flushable Wipe Situation

In 2007, "flushable" wipes were introduced to the market. Disposable wipes have a variety of different uses – from sanitary cleansing to make-up removal. The appeal of disposable wipes is that they are convenient and increasingly popular. They are also often now being labeled as "flushable."

As the wipes increased in popularity and sales increased, the problem at the pumps increased as well. Unlike toilet paper, **wet wipes fail to disintegrate.**

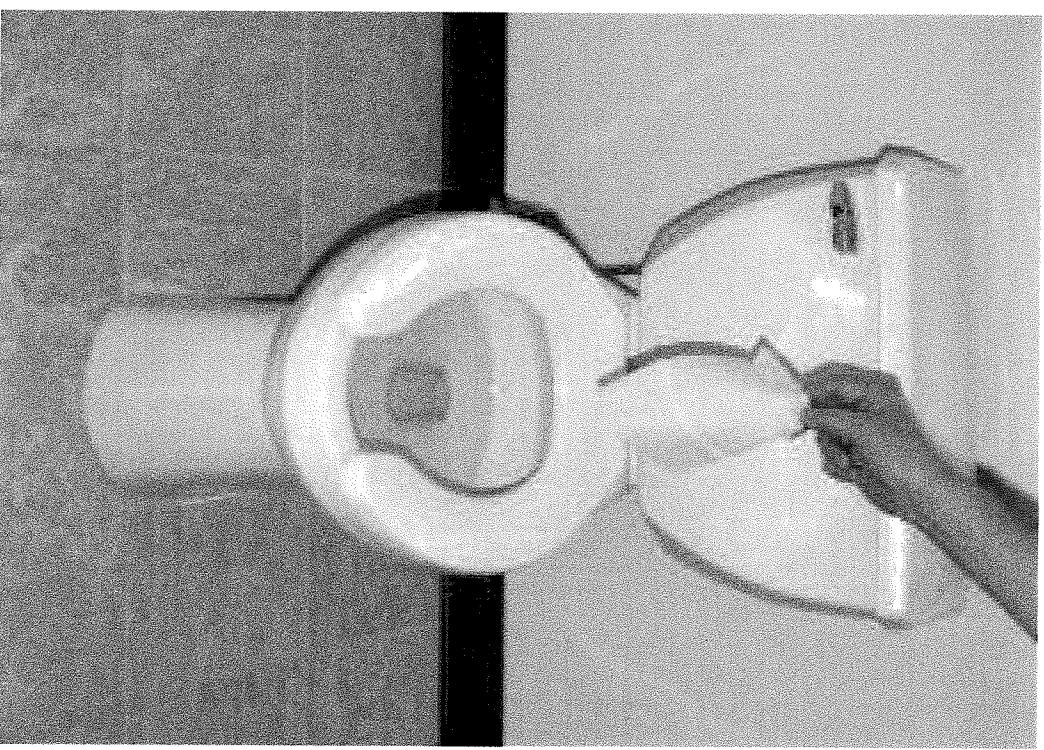
- *These wipes are not breaking up in the sewer systems the way ordinary toilet paper does.*
- *After the wipes are flushed, they tend to bind and clump together, creating huge balls which get tangled in the pumping equipment.*



Source: <https://franklinmiller.com/latest-news/the-flushable-wipe-solution/>

Think Before you Flush

- Blockages occur in residential and municipal sewer systems from accumulations of disposable wipes. The pipes, pumps and other equipment that must process the wipes in wastewater treatment systems are often not capable of handling such waste.
- Sewerage authorities and wastewater treatment facilities continue to be challenged by the increasing volume of sanitary wipes.
- These wipes cause time-consuming bottlenecks, clogging and breakdown of pumps and even cause the back up odorous wastewater into houses. The severity of this problem has received worldwide media attention.



Source: <https://franklinmiller.com/latest-news/the-flushable-wipe-solution/>

What Needs to be Done

- **Municipalities and sewer districts report accruing anywhere between \$400,000 up to \$18 million in costs directly attributable to wipes.**

- So, what can municipalities do to not only combat, but overcome this rapidly growing problem? Many municipalities are finding a solution in the installation of grinding and screening equipment.
- They have found that by adding grinders in strategic location in the wastewater system, the plugging associated with wipes can be greatly reduced or eliminated.
 - Grinders are being installed at the source, at pump stations or in the wastewater treatment facility, including at the headworks or in locations such as in sludge recirculation lines and at the suction side of pumps.
 - > *When wipes build up into mats, mops, balls or large masses, they become an increasingly difficult challenge.*

Source: <https://franklinmiller.com/latest-news/the-flushable-wipe-solution/>

Inline Grinder Pump Alternative

Pros

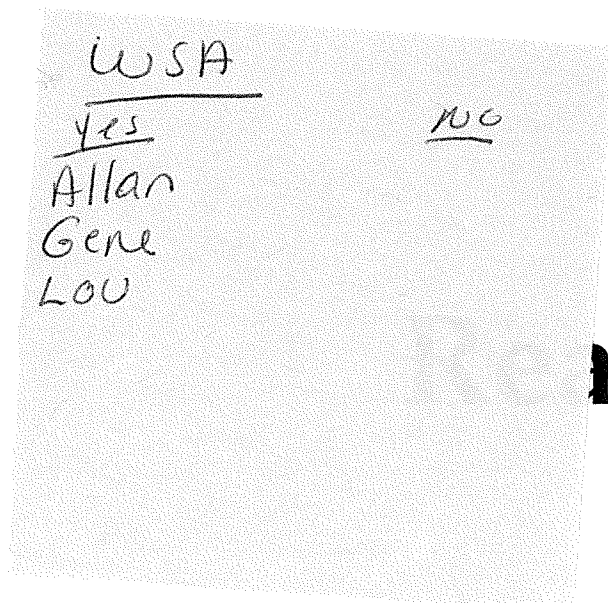
- ❖ Will reduce the size of the debris.
- ❖ Will reduce the frequency of the pump impeller clogs and pump failures.

Cons

- ❖ Initial installation costs.
- ❖ Regular maintenance costs.
- ❖ The debris fibers will bind with oils, fats, and Grease, thus reconstitute itself and will have to be physically removed from each wetwell down stream of the source at a additional cost going forward: equipment, manpower, and disposal at each location.

Newtown Water & Sewer Pollution Control

Down the drain our problems go...



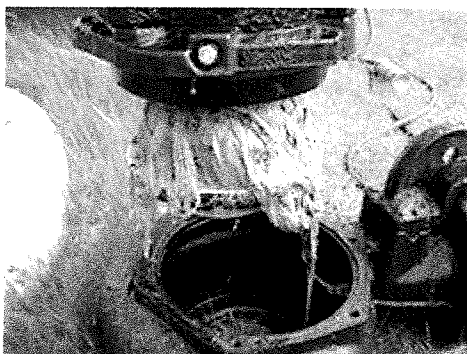
ally?



BY FRITZ EGGER
SEP 18, 2014

NONDISPERSIBLE WIPEs TURNING SEWERS INTO NIGHTMARES NATIONWIDE

Stakeholders across the industry seek solutions to a difficult problem



Increasingly, wipes are causing serious issues for wastewater treatment system operators. Many of the wipes entering sewage systems are not dispersible and technically not flushable. The term “flushable wipes” was spawned in the 1980s when a consumer products company brought a latex-bonded air-laid wet wipe with polyester fibers to the market. The wipe was considered “flushable” since it could transit through the toilet, but with all those polyester fibers, it was not dispersible.

Wipes use is predominant in the U.S., Western Europe, Japan and Israel, but it is expanding on a global scale. In addition, the definition of what is flushable is not subject to industry guidelines, consumer instructions or government oversight. With the explosion of wipes on the market, there is significant consumer confusion about what is and is not flushable. Baby wipes, for example, are not flushable.

Deragging of pumps, valves and other equipment is adding maintenance and causing higher energy costs for sewer agencies around the world. For example, the city of Vancouver, Wash., which removed 429 tons of nonflushables in 2012, has gone to great lengths to document

specific costs associated with this crisis:

- \$78,000 per year for incremental crew labor for pump deragging
- \$30,000 per year for incremental electricity costs for running clogged pumps
- \$900,000 for new pumps to handle these materials

Additionally, troubleshooting and repairing equipment exposes workers to hazardous conditions, including needle sticks from hypodermic needles wrapped up in the rag balls.

Introduced in the early 2000s, wet wipes have become incredibly popular. The disposable wipes industry, which consists of consumer and commercial applications, is estimated at \$6 billion. And forecasts estimate the rapid growth trend will continue.

Three field studies of pump station inlet screens conducted by the Association of the Nonwoven Fabrics Industry (INDA) and wastewater agencies have shown that only between 8 and 12% of flushed materials are products labeled “flushable”; significant portions included baby wipes (18%), nonflushable household wipes (12 to 14%) and nonflushable feminine hygiene products (13 to 18%).

Many agencies are beginning to tabulate the costs associated with the trend of rapidly accelerating wipes use, and several groups are working on solutions.

- The Water Environment Research Foundation (WERF)—in coordination with sewer agencies, engineers and equipment manufacturers—is conducting experiments on the impact of wipes on sewer systems.
- The Water Environment Federation (WEF) formed a work group on nondispersibles. Nearly 100 WEF volunteers and several wipe makers—as well as pump, screen and grinder manufacturers—are working on solutions.
- The Orange County Sanitation District (OCSD) in California implemented an outreach campaign titled “What2Flush” and allows other agencies to request and use the materials for their customers.
- In Maine, an award-winning public education campaign called “Save Your Pipes: Don’t Flush Baby Wipes” was launched. It is funded by INDA and wastewater agencies.
- In Santa Ana, Calif., a pump station with dry-prime pumps was severely impacted by wipes. Installation of a twin-shafted sewage grinder remediated the issue.
- Kimberly Clark has introduced a new substrate—the portion of the wipe that typically does not disperse—with further product development coming.
- Wastewater associations prompted Costco and its supplier Nice-Pak to place a larger “do not flush” symbol on packets of baby wipes. Nice-Pak came through, but other manufacturers have

not followed suit.

- WEFTEC will host a special session dedicated to wipes. On Wednesday morning, look for session #500—“Non-Dispersibles, 3Ps and You: Who Decides What To Flush?”

How can this crisis be mitigated? There are three key tactics the wastewater community seems to be moving towards: public education, better technology and, as a last resort, new fees. New regulations or an outright ban are also mentioned, but seem unlikely—consumers love wipes, so they are here to stay.

The single most important solution is aggressive public education to teach consumers what to flush and what not to flush—and it is the most expensive tactic. Investment in technology and research is in order, both for the wipes industry and wastewater equipment manufacturers. Finally, sewer agencies already face a lack of resources, so a package fee on wipes or increased sewer fees may be needed to deal with the problem.

As with any crisis, it will take all of us working together to develop a suite of solutions. Collaboration is essential among the stakeholders—wastewater agencies and professionals, engineers, equipment manufacturers and wipes manufacturers.



Maple Woods pump station

Monday • Mar 29, 2021 • Adjust
1:57 PM

📁 IMG_0089

Apple iPhone 11



Wide Camera — 26 mm *f*1.8

12 MP · 4032 × 3024 · 4.4 MB

ISO32 26mm 0 ev *f*1.8 1/4444s







Hawleyville pump station debris removed.

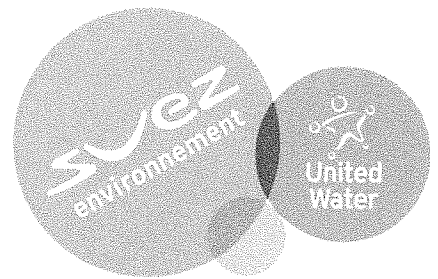
April 26, 2021

Places

Nearby Photos







Julio Segarra
Plant Manager
Suez Environmental Services
24 Commerce Road, Newtown, CT 06470
Tel: 203.525-7117 • Fax: 203.270.4316
Julio.Segarra@suez.com

As illustrated the sanitary sewer collection system worldwide is being overwhelmed by the introduction of materials not suited for the system.

The results from these materials are:

1. Pumps excessive wear and constant clogging.
2. Force mains clogging.
3. Increased operational costs to Water Pollution and its remote pump stations.
4. Increased sanitary line blockages.
5. Increased exposures to injury to employees.

The solutions to this global problem are:

- A. Removal of the debris at its source by its generator using low tech and low cost manual bar screen removal and land fill disposal. (Best)
- B. Installation of in-line grinders at the source. (Reduces immediate problem, but creates another maintenance problem due to replacement of knives and clogging, materials reconstitute themselves down the line and still cause problems.
- C. Absolute best is through education and compliance of people not disposing any the materials. (Has not worked historically)

Respectfully,

Julio Segarra
Chief Plant Operator /Project Manager
Newtown Plant

PRELIMINARY 2022-2023 BUDGET

Sewer Enterprise		Water Enterprise	
5301 Fees & Prof Services	\$35,000	5301 Fees & Prof Services	\$5,000
5310 Prof Svs - Official	\$152,125	5310 Prof Svs - Official	\$15,000
5350 Legal	\$5,000	5505 Contractual Services	\$99,946
5385 Appraisals	\$1,500	5506 Cont. Services Reimbursables	\$42,000
5411 Water	\$4,475	5607 Water Supply-Potatuck	\$45,000
5505 Contractual Services	\$623,953	5621 Energy/Natural Gas	\$1,200
5506 Cont. Services Reimbursables	\$320,000	5622 Energy/Electric	\$38,000
5621 Energy/Natural Gas	\$14,700	5749 Capital Outlay	\$10,000
5622 Energy/Electric	\$66,500	5863 Loan Interest	\$23,000
5749 Capital Outlay	\$50,000	5890 Depreciation	\$152,000
5800 Other Expenditures	\$15,000		
5890 Depreciation	\$588,000		
5861 Bond Interest	\$35,000		
TOTAL	\$1,911,253	TOTAL	\$431,146
	+15%		+6%